

Write your Examination Number here

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M 48



**Coimisiún na Scrúduithe Stáit  
State Examinations Commission**

**Leaving Certificate Examination 2004**

**HOME ECONOMICS – SCIENTIFIC AND SOCIAL**

**HIGHER LEVEL**

<b>CENTRE STAMP</b>

**FRIDAY, 11 JUNE – AFTERNOON, 2.00 to 4.30**

**280/320 MARKS**

*Instructions to Candidates*

- Section A** There are **twelve** questions in this section.  
Candidates are required to answer any **ten** questions.  
Each question carries **6** marks.  
**Write your answers in the spaces provided on the examination paper.**
- Section B** There are **five** questions in this section.  
Candidates are required to answer **Question 1 and any other two questions.**  
Question 1 is worth **80** marks.  
Questions **2, 3, 4 and 5** are worth **50** marks each.  
**Write your answers in the separate answer book provided.**
- Section C** There are **three** questions in this section.  
Candidates are required to answer **one** elective question to include **part (a)** and either **part (b) or part (c).**  
**Candidates who submitted Textiles, Fashion and Design coursework for examination may only attempt Question 2 from this section.**  
Electives **1 and 3** are worth **80** marks each. Elective **2** is worth **40** marks.  
**Write your answers in the separate answer book provided.**

**You must return your examination paper with your answer book at the end of the examination.**

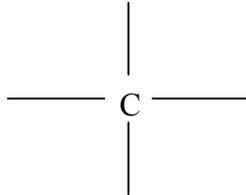
## Section A

Answer any **ten** questions from this section.

Each question is worth 6 marks.

Write your answers in the spaces provided.

1. (a) Complete the diagram showing the basic chemical structure of an amino acid. (4)



- (b) What is an essential amino acid? (2)

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2. (a) State **two** functions of ascorbic acid (Vitamin C) in the diet. (4)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

- (b) State how Vitamin C assists the absorption of iron. (2)

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3. State **one** possible effect on the body of each of the following dietary deficiencies. (6)

Dietary deficiency	Possible effect
Lack of Thiamine (B <sub>1</sub> )	
Lack of Folic Acid	
Lack of Cobalamin (B <sub>12</sub> )	

4. (a) Name the **three** main nutrients found in the endosperm of the wheat grain. (3)

(i) \_\_\_\_\_ (ii) \_\_\_\_\_ (iii) \_\_\_\_\_

(b) Explain the term *gelatinisation*. (3)

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5. (a) What is irradiated food? (2)

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(b) State **two** effects of irradiation on food. (4)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

6. Explain the following and give an example of the use of each. (6)

*Biodegradable packaging* \_\_\_\_\_

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*Use* \_\_\_\_\_

*Modified atmospheric packaging* \_\_\_\_\_

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*Use* \_\_\_\_\_

7. Identify **two** contaminants that may enter the food chain and in each case state a likely source and the possible effect on the body. (6)

Contaminant	Source	Effect on the body
(i)		
(ii)		

8. In relation to each nutrient listed recommend **two** good sources for a vegan diet. (6)

Nutrient	Sources for vegan diet	
Protein		
Calcium		
Iron		

9. Explain **each** of the following: (6)

*Annuity mortgage* \_\_\_\_\_

\_\_\_\_\_

*Endowment mortgage* \_\_\_\_\_

\_\_\_\_\_

10. (a) State **three** advantages of credit buying. (3)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(iii) \_\_\_\_\_

(b) Identify **three** areas controlled by the Consumer Credit Act (1995). (3)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(iii) \_\_\_\_\_

11. (a) List **two** desirable properties of a fabric for upholstered furniture. (2)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) What information does the following label convey to the consumer? (4)



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. In relation to the environment explain and give an example of each of the following: (6)

*Renewable resource* \_\_\_\_\_

\_\_\_\_\_

*Example* \_\_\_\_\_

*Non-renewable resource* \_\_\_\_\_

\_\_\_\_\_

*Example* \_\_\_\_\_

## Section B

Answer Question 1 and any other two questions from this section.  
Question 1 is worth 80 marks. Questions 2, 3, 4 and 5 are worth 50 marks each.

1. *Fish and other seafood is becoming a more popular choice as an alternative to meat.*  
(Consumer Choice, June 2001).

The following chart provides information on the types of fish consumed.

**Estimated Consumption of Seafood in Ireland, 1997-2001 (live weight tonnes).**

Fish type	1997	1999	2001
Salmon and trout	7,500	11,500	12,500
White fish	36,850	34,500	33,125
Tuna	4,100	6,200	7,100
Shellfish	3,490	4,050	4,565

(Bord Iascaigh Mhara).

- (a) Using the information provided in the table comment on consumer trends in fish consumption. Suggest reasons for such trends. (20)
- (b) Give a detailed account of the nutritive value of fish. (12)
- (c) State why oily fish is recommended for the diet of a person with coronary heart disease. (6)
- (d) Oily fish is a good source of Vitamin D.  
Give an account of Vitamin D and refer to (i) properties, (ii) biological functions and (iii) recommended dietary allowance (RDA). (24)
- (e) Give an account of **six** key factors that consumers should consider when buying fresh fish **and** fish products. (18)

2. *In Ireland during 1998 and 1999 almost 2,000 people became ill from infectious gastroenteritis, a form of food poisoning. The commonest sources of infections were restaurants, hotels and takeaways. Some outbreaks also occurred in private homes.*  
(Food Safety Authority of Ireland).

- (a) List **five** guidelines that should be followed to ensure the safe preparation and storage of food in the home. (10)
- (b) Explain how a Hazard Analysis Critical Control Point (HACCP) system can benefit a catering business in the prevention of food poisoning outbreaks. (12)
- (c) Differentiate between (i) infectious food poisoning and (ii) toxic food poisoning. (8)
- (d) Name and give a detailed account of any **one** type of food poisoning bacteria. Refer to (i) sources of infection, (ii) high-risk foods and (iii) symptoms. (20)

3. *Brian and Helen Jones live with their two children, Colm (4) and Niamh (2). Both parents work full time and have a combined net monthly income of €3,250. They also receive child benefit of €250 per month. Their mortgage repayment is €600 per month. They commute to work using the family car. Colm and Niamh attend the local crèche each day.*

- (a) Outline the considerations that the Jones family should take into account when planning their household budget. (12)
- (b) Using the information given above, set out a monthly budget for the Jones family to ensure efficient management of financial resources. (16)
- (c) Give details of **one** health insurance scheme that you would recommend for this family. Give reasons for your choice. (12)
- (d) State how the family functions as a financial unit within the economy. (10)

4. *A responsible consumer will make informed choices when selecting goods and services, will know how to get best value for money and know how to seek redress if things go wrong.*
- (a) Discuss **three** factors that affect consumers' decision-making when selecting goods and services. (12)
- (b) Name **two** types of retail outlets where household appliances can be purchased. State **one** advantage and **one** disadvantage of each outlet. (12)
- (c) Set out details of a study that you have undertaken on a household appliance with a heating element. Refer to:  
(i) working principle  
(ii) guidelines for using the appliance  
(iii) energy efficiency. (18)
- (d) Outline the role of the Sale of Goods and Supply of Services Act (1980) in protecting the consumer should the product prove faulty. (8)
5. *The 2002 Census of Population reveals the following results:*
- *the number of divorced persons has trebled since 1996*
  - *the population is getting older*
  - *average family size has reduced to 1.6.*
- (a) Describe **four** main functions of the family in modern society. (16)
- (b) Explain how the role of older people within the family has changed as a result of social and economic factors. (12)
- (c) Outline the historical development of the family in Ireland from the beginning of the twentieth century to the present day. (16)
- (d) State how the family is protected by the Family Home Protection Act (1976). (6)

## Section C

Answer one elective question from this section.

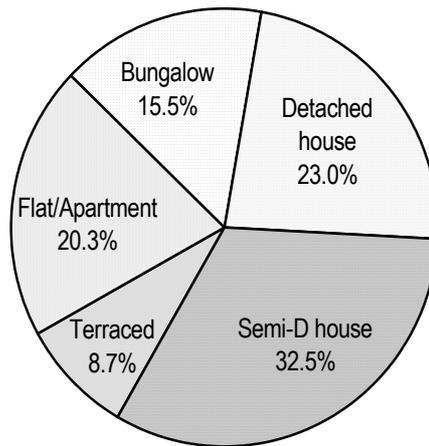
Candidates who submitted Textiles, Fashion and Design coursework for examination may only attempt Question 2.

### Elective 1 - Home Design and Management (80 marks)

Candidates selecting this elective must answer 1 (a) and either 1 (b) or 1 (c).

1. (a) *Ireland has one of the highest rates of home ownership in Europe.*  
The illustration below shows the new house types built in Ireland in 2002.

New House Types (whole country) 2002



(Department of the Environment, Heritage and Local Government. Annual Housing Bulletin, 2002).

- (i) Analyse **three** factors that have contributed to the distribution of new house types as shown in the pie chart above. (15)
- (ii) Outline (a) the social, (b) the cultural and (c) the environmental factors that influence the choice of housing styles. (15)
- (iii) Describe the procedure involved in obtaining planning permission to build a house. (12)
- (iv) State the benefits of the National House Building Guarantee Scheme. (8)

and

1. (b) *Excessive ventilation is as undesirable as insufficient ventilation as it can lead to low room temperatures, excessive draughts and high heating bills.*
- (i) State the importance of adequate ventilation in a house. (9)
  - (ii) Explain how natural ventilation is provided in a modern house. (9)
  - (iii) Suggest a suitable method of artificial ventilation for a kitchen. Explain the underlying principle of the suggested method. (12)

or

1. (c) *The efficient use of energy is the responsibility of every consumer.*

In relation to energy use in the home give details of:

- (i) potential energy inefficiencies and strategies for improvement (18)
- (ii) the effects of fuel emissions on the environment. (12)

**Elective 2 - Textiles, Fashion and Design (40 marks)**  
**Candidates selecting this elective must answer 2 (a) and either 2 (b) or 2 (c).**

**2. (a)**     ***Clothing is often used to create an impression.***

- (i) Sketch and describe a formal outfit suitable for a teenager to wear to an interview. (9)
- (ii) Indicate:
- (a) how the principles of design have been applied
- (b) how the design of the outfit reflects current fashion trends. (16)

**and**

**2. (b)**     ***Different fibres are often blended together to produce a fabric that exhibits the most desirable characteristics of the fibres used.***

Write up a profile of a blended fabric under the following headings:

- fibre composition
- yarn production
- fabric properties
- suitable uses of the fabric. (15)

**or**

- 2. (c)**
- (i) Discuss the contribution of Irish Designers to the success of the clothing industry in Ireland. (9)
- (ii) Outline the role played by the craft industry in Irish Fashion. (6)

### Elective 3 - Social Studies (80 marks)

Candidates selecting this elective must answer 3 (a) and either 3 (b) or 3 (c).

3. (a) *In a post-industrial society increasing emphasis is placed on the ability to continuously acquire knowledge, skills and competencies in an environment of constant change.* (Report of the Taskforce on Lifelong Learning, 2002).

(i) Discuss the factors that affect educational achievement. (12)

(ii) Name and give details of **two** initiatives that have improved access to second chance education. (14)

(iii) Analyse the possible reasons why many people return to education having concluded their initial education and / or training. (24)

**and**

3. (b) *“40% of parents with young children use childcare regularly”* (CSO 2003).

(i) (a) Name **two** types of childcare available in your locality.  
(b) Outline the key considerations a parent should take into account when evaluating a childcare option. (14)

(ii) Discuss the factors that have contributed to the increased participation of women in the workforce. (16)

**or**

3. (c) *Changing work patterns have led to increased leisure time.*

(i) State the factors that influence family leisure patterns. (12)

(ii) (a) Name **two** leisure activities available in your community for teenagers.  
(b) Analyse how **each** activity named contributes to the physical, social and emotional well-being of teenagers. (18)

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